

THE IMPACT OF GRADING ON THE SPELLING  
PROGRESS OF FOURTH GRADE PUPILS

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A Field Report  
Presented to  
The Graduate Division  
Drake University

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science in Education

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by  
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August 1967

1967  
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## TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION . . . . .	1
The Problem . . . . .	2
Statement of the problem . . . . .	2
Importance of the study . . . . .	2
Limitations . . . . .	9
Definition of Terms Used . . . . .	9
Spelling ability . . . . .	9
Grades . . . . .	9
Corrected test . . . . .	10
Procedure . . . . .	10
Organization . . . . .	13
II. REVIEW OF THE LITERATURE . . . . .	15
III. PRESENTATION AND ANALYSIS OF DATA . . . . .	28
IV. SUMMARY AND RECOMMENDATIONS . . . . .	54
BIBLIOGRAPHY . . . . .	58

# LIST OF TABLES

TABLE	PAGE
I. Number of Misspelled Words By Each of the Twenty-six Fourth Grade Pupils of the Marshalltown Community School District Included in the Study on Twenty-Four Final Tests and Four Unit Tests Given From September, 1966 to March, 1967 .....	29
II. Intelligence Quotients of the Twenty-six Fourth Grade Pupils in the Marshalltown Community School District Involved in the Study During March and April of 1967 .....	30
III. Group A and Group B as Organized from Twenty-six Fourth Grade Pupils in the Marshalltown Community School District During March, 1967 on the Basis of Intelligence Quotients and the Number of Misspelled Words on Twenty-four Weekly Final Tests and Four Unit Tests Given from September, 1966 to March, 1967 ..	32
IV. Spelling Errors and Grades Given to the Twenty-six Fourth Grade Pupils of the Marshalltown Community School District in Group A and Group B on the Weekly Final Test of the First Week of the Study March 10, 1967 .....	33
V. Spelling Errors and Grades Given to the Twenty-six Fourth Grade Pupils of the Marshalltown Community School District in Group A and Group B on the Weekly Final Test of the Second Week of the Study March 17, 1967 .....	37
VI. Spelling Errors and Grades Given to the Twenty-six Fourth Grade Pupils of the Marshalltown Community School District in Group A and Group B on the Weekly Final Test of the Third Week of the Study March 24, 1967 .....	40
VII. Spelling Errors and Grades Given to the Twenty-six Fourth Grade Pupils of the Marshalltown Community School District in Group A and Group B on the Weekly Final Test of the Fourth Week of the Study March 31, 1967 .....	42



## TABLE

## PAGE

VIII.	Spelling Errors and Grades Given to the Twenty-six Fourth Grade Pupils of the Marshalltown Community School District in Group A and Group B on the Weekly Final Test of the Fifth Week of the Study April 7, 1967 .....	46
IX.	Spelling Errors and Grades Given to the Twenty-six Fourth Grade Pupils of the Marshalltown Community School District in Group A and Group B on the Unit Review Test of the Sixth Week of the Study April 14, 1967 .....	49

## CHAPTER I

### INTRODUCTION

During the past twenty or thirty years, many criticisms have been leveled at the achievement of children in spelling.<sup>1</sup> The poor spelling of school children has provided more headaches for teachers and more conversations for parents than almost any other topic.<sup>2</sup> To prepare children of a group to spell words they require is a challenge to the teachers of our society, for research shows that present-day spelling is not of high quality.<sup>3</sup> With respect to spelling, research suggests that the performance of many boys and girls does appear to have improved less than in other content fields since 1900.<sup>4</sup> A well documented study by B. R. Rock, indicates that from 1844 to the 1950's children generally have improved appreciably

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<sup>1</sup>Harold G. Shane and others, Beginning Language Arts Instruction With Children (Columbus, Ohio: Charles E. Merrill Books, Incorporated, 1962), 167.

<sup>2</sup>Mauree Applegate, Easy In English (Evanston, Illinois: Row, Peterson and Company, 1960), 466.

<sup>3</sup>Virgil Herrick and Jacob B. Leland, Children and the Language Arts (Englewood Cliffs, New Jersey: Frontice-Hall, 1955), 255.

<sup>4</sup>Shane, op. cit., 168.

in academic performance from one generation to another--but spelling is the one subject that has lagged.<sup>1</sup> Parents, businessmen, and other adults in the community are continually evaluating the schools' spelling achievement.<sup>2</sup> That it is a universal subject there is no doubt, for its scope of complaint is country-wide.<sup>3</sup>

# I. THE PROBLEM

Statement of the problem. The purpose of the study was to determine the impact of grading on the spelling progress of fourth grade pupils when credit was given for the fractional part of a word spelled correctly, even though the word itself was misspelled, compared to giving no credit for a word if a part was misspelled.

Importance of the study. Spelling is a necessary part of life for everyone--the businessman, the farmer, the professional man, the housewife, and for the learner in elementary, secondary, and higher education.<sup>4</sup> Spelling

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<sup>1</sup>Ibid.

<sup>2</sup>Ruth G. Strickland, The Language Arts in the Elementary School (Boston: D. C. Heath and Company, 1957), 390.

<sup>3</sup>Applegate, op. cit., 466.

<sup>4</sup>James A. Fitzgerald, and Patricia G. Fitzgerald, Teaching Reading and the Language Arts (Milwaukee: The Bruce Publishing Company, 1965), 291.

is an essential element in any writing experience.<sup>1</sup> Material that is incorrectly spelled and carelessly written mirrors a careless, inconsiderate person who is not concerned about the impression he makes and does not care how much time and thought others must spend on trying to decipher his meaning.<sup>2</sup> Any material that is to be read by others must follow conventional patterns of spelling if others are to glean the proper meaning.<sup>3</sup> A correctly spelled, carefully produced piece of writing will be thought of as mirroring a considerate person whose self-respect demands that he live up to a high standard.<sup>4</sup> Spelling ability is important even though spelling is one of the minor subjects in the curriculum.<sup>5</sup> Spelling is one of those skills--a language arts--essential to the achievement of the objectives of education.<sup>6</sup> As children record or communicate their ideas or facts by writing they

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<sup>1</sup>Strickland, op. cit., 373.

<sup>2</sup>Ibid., 384.

<sup>3</sup>Ibid., 373.

<sup>4</sup>Ibid., 384.

<sup>5</sup>Ernest Horn, What Research Says to the Teacher Teaching Spelling (Washington, D. C.: Department of Classroom Teachers and the American Educational Research Association, 1954), 3.

<sup>6</sup>Fitzgerald, op. cit., 295.

need the ability to spell correctly.<sup>1</sup> Spelling is necessary for writing in such solid subject areas as reading, composition, science, arithmetic, and social studies.<sup>2</sup> Spelling errors detract from the effectiveness of any written work.<sup>3</sup> The ability to spell correctly not only gives the individual confidence and independence in his writing and makes for more effective communication, but it also represents a reasonable if not necessary courtesy to extend to the reader.<sup>4</sup> Mauree Applegate stated in her book Easy in English:

Let's just face it--there are too many poor spellers today among parents, teachers, and children. Since the two of those named are past the help of the schools, what can we do to help children become better spellers?

That's our problem--ours--the schools. Let us face it, ponder it, and, of course, conquer it.<sup>5</sup>

Sterl A. Artley has prepared several generalizations regarding effective spelling which are based on research reviews. Among the conclusions: instruction is most

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<sup>1</sup>Harry A. Greene, and Walter T. Petty, Developing Language Skills in the Elementary Schools (Boston: Allyn and Bacon, Inc., 1963), 112.

<sup>2</sup>Fitzgerald, op. cit., 295.

<sup>3</sup>Horn, loc. cit.

<sup>4</sup>Green, loc. cit.

<sup>5</sup>Applegate, op. cit., 467.

effective when a child's attitude is favorable.<sup>1</sup> Pupils should be convinced that they can improve their spelling ability. They need definite evidence that they are making progress.<sup>2</sup> How well a pupil learns to spell depends largely upon his interest.<sup>3</sup> Children who have little interest in spelling are not likely to succeed in it. It is especially important that even small improvements by poor spellers should be noted and praised.<sup>4</sup> Gertrude Hildreth said:

Teachers tend too frequently to be oversensitive to spelling errors in the writing of young children, and, as in arithmetic and reading, demand standards of accomplishment too high for young children, forgetting that considerable improvement is the invariable accomplishment of maturity and insight on the part of the child. As Suzzallo suggested, the children are growing in spelling, not grown.

Beginnings in spelling must be recognized even when the spelling is not precisely correct. "movd" for "moved," "aple" for "apple," "dol" for "doll." The child demonstrates that he has made a successful beginning when he can write from memory no more than the correct initial letters of words. This is the first step beyond having no idea whatsoever of the spelling of a word. Even such spellings as "jellie" for "jelly," "doler" for "dollar," "frend" for "friend," "mach" for "match," "braclet" for "bracelet" are not far from right, for the number of letters in each word is approximately correct and the syllables are

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<sup>1</sup>Sterl A. Artley, "Principles Applying to Improvement of Spelling Ability," Elementary School Journal, XLIX (November, 1948), 137-146.

<sup>2</sup>Horn, op. cit., 20.

<sup>3</sup>Ibid., 19.

<sup>4</sup>Ibid., 26.

indicated. These errors are not as serious when young children make them as the random spelling of these words would be.

The point is not that the school encourages partially correct spelling or teaches children to spell as they please, but that 100 per cent percision is not acquired all at once in spelling any more than in a child's early efforts to speak. These first partial learnings represent the first stage in the long developmental process of learning to spell correctly. The pupil is closely observed to make<sup>1</sup> sure that he is progressing in spelling right along.

Awareness of success attained is pleasant and motivating.<sup>2</sup> Children should have encouragement when they spell correctly as well as criticism when they spell incorrectly.<sup>3</sup> As Mauree Applegate stated: "It pays to have patience with children; one is never sure which clam will have the pearl."<sup>4</sup>

It has been said that the corrected test technique alone will contribute from ninety per cent to ninety-five per cent of the achievement resulting from combined effect of pronunciation exercise, corrected test, and study.<sup>5</sup>

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<sup>1</sup>Gertrude Hildreth, Learning the Three R's (New York: Educational Publishers, Incorporated, 1947), 504.

<sup>2</sup>Fitzgerald, op. cit., 297.

<sup>3</sup>Robert S. Fleming, Curriculum for Today's Boys and Girls (Columbus, Ohio: Charles E. Merrill Books, Inc., 1963), 179.

<sup>4</sup>Applegate, op. cit., 475.

<sup>5</sup>Thomas D. Horn, "The Effect of the Corrected Test on Learning to Spell," Elementary School Journal, XLVII (January, 1947), 277-285.

If this is true, the corrected test appears to be the most important single factor contributing to achievement in spelling.<sup>1</sup> These tests and the correction of them are highly valuable in the learning process.<sup>2</sup> Thomas Horn, after investigating the effect of the corrected test on learning to spell by 268 sixth-grade children reported that the corrected test was the "most important single factor contributing to achievement in spelling."<sup>3</sup> Since the corrected test appears to be so potent a factor, it should be utilized during spelling periods in such ways as to insure its maximum effect.<sup>4</sup>

Lucile Morris stated that new developments in educational philosophy had changed the purpose of marking or grading from the recording of results to increasing the effectiveness of student learning.<sup>5</sup> Edward C. Bolreier noted as a principle that marks must be designed and used

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<sup>1</sup>Paul C. Burns, and Alberta L. Lowe, The Language Arts in Childhood Education (Chicago, Illinois: Rand McNally and Company, 1966), 264.

<sup>2</sup>Fitzgerald, op. cit., 313.

<sup>3</sup>Thomas D. Horn, "The Effect of the Corrected Test on Learning to Spell," op. cit., 285.

<sup>4</sup>Burns, loc. cit.

<sup>5</sup>Lucile Morris, "Evaluating and Reporting Pupil Progress," Elementary School Journal, LIII (1952), 144-49.



to benefit the student rather than the teachers.<sup>1</sup> Dan F. Cagle regarded the aim of evaluation to be an aid to the maximum growth of students.<sup>2</sup> Promise of future improvements in marking practices may be found in support for continuing analysis.<sup>3</sup> There are many unanswered questions and unsolved problems in this field. The question of the effect of marks upon those to whom they are given is very important and merits much study.<sup>4</sup> An attitude favoring continuous reassessment of the marking system may be of particular value during a period when pressures on education have considerable impact on the purposes of marking.<sup>5</sup> Much opinion has been expressed but few facts are available. Despite the great amount of attention given to the marking system and its improvement, there are very few published studies

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<sup>1</sup>Edward C. Bolmeier, "Principles Pertaining to Marking and Reporting Pupil Progress," School Review, LIX (1951), 15-24.

<sup>2</sup>Dan F. Cagle, "How May We Make the Evaluation and Reporting of Student Achievement More Meaningful?" National Association of Secondary School Principals' Bulletin, XXXIX (April, 1955), 24-27.

<sup>3</sup>Ernest Horn, "Spelling," Encyclopedia of Educational Research, Third Edition (edited by Chester W. Harris), (New York: The Macmillan Company, 1960), 789.

<sup>4</sup>Ernest Horn, "Spelling," Encyclopedia of Educational Research, edited by Walter S. Monroe, (Revised edition; New York: The Macmillan Company, 1950), 715.

<sup>5</sup>Horn, Encyclopedia of Educational Research, edited by Chester W. Harris, Third edition, loc. cit.

giving even semi-objective data as to the results of programs directed to this end.<sup>1</sup> Although research has uncovered some limitations and suggested some promising directions in marking procedures, no commonly accepted system has emerged from half a century of inquiry.<sup>2</sup>

## II. LIMITATIONS

The study was limited to twenty-six fourth grade pupils out of a class of twenty-seven. One pupil was not included in the study because she had been in the class for only two weeks when the study began, and therefore, no record of misspelled words for the first twenty-four weeks of school was available.

## III. DEFINITION OF TERMS USED

Spelling ability. Spelling ability may be defined as the ability to spell specific words.<sup>3</sup>

Grades. Grades are often referred to as marks. The term "marks" or "grades" is employed to refer to letters, per cents, or other means used to record and to report to pupils, parents, and others concerned the status of

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<sup>1</sup>Horn, Encyclopedia of Educational Research, Revised edition, loc. cit.

<sup>2</sup>Horn, Encyclopedia of Educational Research, edited by Chester W. Harris, Third edition, loc. cit.

<sup>3</sup>Greene, op. cit., 537.

pupils in those achievements, activities, and characteristics which the school evaluates.<sup>1</sup>

Corrected test. The corrected test refers to test correction after each test has been given.<sup>2</sup>

#### IV. PROCEDURE

In order to determine the impact of grading on the spelling progress of fourth grade pupils when credit was given for the fractional part of a word spelled correctly even though the word itself was misspelled, compared to giving no credit for a word if a part was misspelled, the writer first had to determine what research in this field had already been completed. In order to do this, the writer surveyed research studies pertaining to spelling and grading. No research of the nature proposed was found. Then a review of literature was made about spelling as a background for the study.

In order to organize two groups for the study, the number of words missed on twenty-four weekly final tests and four unit tests were counted. A list was then made

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<sup>1</sup>Horn, Encyclopedia of Educational Research, Revised edition, op. cit., 711.

<sup>2</sup>Fitzgerald, op. cit., 313.

according to the total number of words missed by each pupil. Instead of using the name of each child throughout the study, each child was assigned a letter of the alphabet. The letter of the pupil who had misspelled the fewest words and the number of words misspelled were placed on the first line in the list. The letter of the pupil with the second smallest number of misspelled words and the number of words misspelled were placed on the second line in the list. The letters of the other pupils taking part in the study and the number of words that each misspelled were then placed in the list according to the number of misspelled words, starting with the fewest misspelled words and ending the list with the letters of those pupils having the greatest number of misspelled words.

Then the intelligence quotients of the pupils were obtained from the cumulative folders. The intelligence quotients along with the letters of the pupils were then listed in order, the letter of the pupil and highest intelligence quotient listed first on the list, followed by the second highest intelligence quotient, continuing down the list to the lowest intelligence quotient of the pupils studied.

The writer then organized two groups, Group A and Group B, on the basis of the number of words misspelled on the twenty-four weekly final tests and four unit tests

and on the basis of the intelligence quotients of the pupils studied. Thirteen pupils were assigned to each group out of the twenty-seven pupils in the fourth grade class. One girl did not participate in either group because she had been part of the class for only two weeks prior to the study, therefore, she had no previous spelling record to be used as a basis for assigning her to a group. The writer tried to organize the two groups so as to make them as similar as possible in spelling ability and intelligence. The total number of words missed by Group A was 587 on the twenty-four weekly final tests and four unit tests. The total number of words missed by Group B on the twenty-four weekly final tests and four unit tests was 583. The mean intelligence quotient for Group A was 109, and Group B had a mean intelligence quotient of 108.

At the beginning of the study the writer told the pupils that she was going to do an experiment for the next five weeks in spelling just as they often do in science. The writer told the pupils that they would pronounce their words, take their trial test over twenty new words at the beginning of the week, study the words missed on the trial test, use the new words in written exercises, and then take a final test over the twenty new words each Friday just as they had done all school year. The writer also said that if they noticed anything different when their final

tests were returned each Friday, it was because of the experiment. The writer did not tell the class about being grouped at any time nor the purpose of the study.

For five weeks the writer corrected the twenty words on the weekly final test, each word being worth five points. The writer graded Group A's weekly final test, giving credit for the fractional part of a word correctly spelled even if part of the word was misspelled. For five weeks the writer graded Group B on the basis of the word being all right or all wrong. At the end of the five weeks a unit test was given containing the words studied by both groups during the five weeks. Grades on the unit test were used to compare the progress of the two groups, and the impact of grading on the spelling progress. Grades on the unit test were compared with the use of descriptive statistics. The spelling progress of the two groups was compared.

## V. ORGANIZATION

This field study as conducted and presented in this report has been organized to determine the impact of grading on the spelling progress of fourth grade pupils when credit was given for the fractional part of a word spelled correctly, even though the word itself was misspelled, compared to giving no credit for a word if a part was misspelled.

Chapter I is the introductory chapter, containing the statement of the problem, the importance of the study, definitions of terms used, and the procedures used by the writer in attempting to determine the impact of grading on the spelling progress of fourth grade pupils. Chapter II, through a review of the literature, shows the feeling of important and influential educators in the area of spelling. Chapter III consists of the presentation and analysis of data. A summary of this report and recommendations are contained in Chapter IV.

## CHAPTER II

### REVIEW OF THE LITERATURE

Spelling is a sensory-motor skill. Seeing, hearing, saying, and writing are involved.<sup>1</sup> The spoken word is a symbol and the written word becomes a matching symbol.<sup>2</sup>

Previous to 1755 when Samuel Johnson wrote "A Dictionary of the English Language," literate English-speaking people spelled pretty much as they wished. In the sixteenth century a word like guest might appear in print as "gest," "geste," "guesta," "ghest," or "gheste."<sup>3</sup> As people accepted the spelling recorded for them in the early English dictionaries these forms came to be considered standard or correct and all other spellings were considered wrong. In 1783, Noah Webster, an American, published the first distinctly American spelling textbook.<sup>4</sup> To have gone through the whole speller was almost the measure of

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<sup>1</sup>Harold G. Shane and others, Improving Language Arts Instruction in the Elementary School (Columbus, Ohio: Charles E. Merrill Books, Incorporated, 1961), 236.

<sup>2</sup>Strickland, op. cit., 370.

<sup>3</sup>Mario Pei, All About Language (Philadelphia: J. B. Lippincott Company, 1954), 115.

<sup>4</sup>Burns, op. cit., 257.



one's education. As a result Americans became perhaps even more conscious of correct spelling than the English and more arbitrary in their adherence to standards.<sup>1</sup> Other spellers followed, presenting an exceedingly great number of words, but with little attempt to list those words which might be most important for children to learn to spell. Some early books contained 10,000 or more words. At the beginning of the present century, ten new words each day (50 per week) was quite a common assignment.<sup>2</sup>

Spelling in English is difficult for children because of many apparent inconsistencies.<sup>3</sup> There are twenty-six letters in our alphabet, three of which--c, q, and x--are in a sense duplicates of others. The twenty-three necessary letters represent forty-four sounds.<sup>4</sup> Less than 200 of the 350 most fundamental words for writing can be written as they sound. More than 150 of these common words such as again, always, before, cousin, game, like, near, people, rain, third, where, who, and write

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<sup>1</sup>Strickland, op. cit., 369.

<sup>2</sup>Burns, op. cit., 257.

<sup>3</sup>Shane and others, Improving Language Arts Instruction in the Elementary School, op. cit., 168.

<sup>4</sup>Fitzgerald, op. cit., 293.

are not spelled as they sound.<sup>1</sup> Gertrude Hildreth attributes much of the trouble to the nonphonetic character of common words such as trouble, straight, and laugh.<sup>2</sup> Present spelling is difficult because one letter may represent several sounds, as "a" in ate, at, arm, path, case, tail, and what.<sup>3</sup> There are at least fourteen ways of spelling the long sound of a as in ate, main, day, great, veil, they, weigh, feign, aye, eh, matinee, finance, gauge, bouquet.<sup>4</sup> The same sound may be represented by many different combinations of letters, as in no, low, sew, four, beau, dough, and chauffeur.<sup>5</sup> Or suppose one tries to spell the word cinnamon. The sound of the first syllable might be spelled sin--as in sincere, syn--as in syntax, cin--as in cinder, or cyn--as in cynic or Cynthia.<sup>6</sup> The short sound of i as in pin is spelled with i only a little more than half the time. Excluding long vowels influenced

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<sup>1</sup>James A. Fitzgerald, Teaching of Spelling (Milwaukee: Bruce Publishing Company, 1951), 115.

<sup>2</sup>Gertrude Hildreth, Teaching Spelling (New York: Henry Holt and Company, 1955), 3.

<sup>3</sup>Burns, op. cit., 256.

<sup>4</sup>Fitzgerald and others, Teaching Reading and the Language Arts, op. cit., 293.

<sup>5</sup>Burns, op. cit., 256.

<sup>6</sup>Strickland, op. cit., 369.

by silent e, there is no long vowel sound in which the most frequent spelling is found in fifty per cent of common words.<sup>1</sup> About one-half of our words have silent letters, and about one-sixth of our words have double letters, like little.<sup>2</sup>

One of the explanations of the peculiarities of our spelling is the fact that American English has evolved from so many sources: Latin, Greek, Anglo-Saxon, German, Spanish, French, Arabic, to name but a few.<sup>3</sup> For example, "The gymnasium was open to the public during the basketball season." contains root words from Greek (gymnasium) Latin (public) Old French and Latin (during) Middle English (basket and ball), and French (season). Spelling is difficult also because unfortunately pronunciations differ from time to time and from place to place. When Anglo-Saxon was spoken in England many words were spelled phonetically that are unphonetic as we now pronounce them. For example, Ruth G. Strickland in her book, The Language Arts in the Elementary School stated:

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<sup>1</sup>Horn, What Research Says to the Teacher Teaching Spelling, op. cit., 22.

<sup>2</sup>Burns, op. cit., 256.

<sup>3</sup>Shane and others, Improving Language Arts Instruction in the Elementary School, op. cit., 67.

The word knight was pronounced k-n-i-g-h-t. Eventually people dropped the pronunciation of the k and the h and drawled out the i so that it had the long sound of i in mine instead of the short sound of i in it. People continue to write knight though they have pronounced it nit for nearly a thousand years. The pronunciations of many common words differed in Shakespeare's time from their pronunciations today. Certainly a language used as mother language by a quarter of a billion people from Melbourne to London to Chicago will not be pronounced in exactly the same manner by everyone. The Australians pronounce Australia, gray, lace, and veil with the long i sound where English and American speakers would use the long a sound. The pronunciation of the letter r in the United States varies from the uh sound of the Georgian in "fathuh" to the harsh, drawn-out r-r-r of the Middle West, "fatheur." Speakers in Maine add the r sound to the end of the word idea although they add no r to its spelling.<sup>1</sup>

The question of changing spelling with pronunciation is debatable: Harvey Kinsey Boyer in his article "Why You Can't Spell," illustrated how difficult the volume of literature we now have would be to read unless it was all reprinted in the prevailing phonetic pattern by the sentence: "Professors cud rite buks on speling refawm" and children could learn to write "Meri had a litl lam."<sup>2</sup> So the compromise continues--English speech changes slightly from place to place from generation to generation, but English spelling tends to cling to the standards set by Johnson and Webster.<sup>3</sup> A solution to the problem might

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<sup>1</sup>Strickland, op. cit., 370.

<sup>2</sup>Harvey Kinsey Boyer, "Why You Can't Spell," Saturday Review, (October 2, 1954), 17.

<sup>3</sup>Strickland, op. cit., 370.

be to make English spelling completely phonetic. This could be done by using the alphabet of the International Phonetic Alphabet or any other set of characters found acceptable. The problem would still be the regional variations in standard speech.<sup>1</sup> Perhaps in time radio and television may standardize the use of the language to such an extent as to make systematic simplification of spelling profitable.<sup>2</sup>

Clearly, skill in spelling is a challenge to all from the primary years to adult maturity.<sup>3</sup> Students must be shown that spelling is personally important to them, that the words they are learning are those most likely to be needed in both the present and the future, that the study methods being used are efficient, that spelling is important in practically all writing situations and not just the spelling period, that they are making progress in spelling as a class and individuals, and that satisfaction and pride in good spelling are worthwhile.<sup>4</sup>

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<sup>1</sup>Burns, op. cit., 256.

<sup>2</sup>Strickland, op. cit., 370.

<sup>3</sup>Shane and others, Improving Language Arts Instruction in the Elementary School, op. cit., 168.

<sup>4</sup>National Council of Teachers of English, Children's Writing: Research in Composition and Related Skills (Champaign, Illinois: National Council of Teachers of English, 1961), 54.

Experts in the field of spelling through their research and suggestions have presented guidelines for the teaching spelling.

Much research has been done regarding what words should be taught and how many. Probably the most important studies of words used in adult writing were those of Ayres, Thorndike, and Horn.<sup>1</sup> The studies of Ayres, Thorndike, and Horn provided the basis for many later and less extensive studies of adult writing vocabulary. The most important study of the writing vocabulary of children is probably that of Rinsland.<sup>2</sup> Fitzgerald has contributed "A Basic Life Spelling Vocabulary" consisting of 2,650 words compiled from a number of child and adult writing vocabularies.<sup>3</sup> Data related to word lists from the studies include the following: 100 words comprise about fifty-five per cent to sixty per cent of the total words used in the average person's writing; 500 words comprise about seventy-five per cent to eighty per cent of the total words used in the average person's writing; 1000 words comprise about eighty-five per cent of the total words used in the average person's writing; 2,000 words

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<sup>1</sup>Burns, op. cit., 379.

<sup>2</sup>Strickland, op. cit., 379.

<sup>3</sup>Strickland, loc. cit.

comprise about ninety per cent of the total words used in the average person's writing; and 3,000 words comprise about ninety-five per cent of the total words used in the average person's writing.<sup>1</sup> The fourth thousand commonest words add less than 1.2 per cent of the running words to be written.<sup>2</sup> It can be seen from the preceding data that an increase in the number of words beyond this amount does not result in comparable increases in spelling power in writing done by the average child or adult.<sup>3</sup> These data seem to warrant the assumption that the basic core of spelling words should include between 3,000 and 4,000 and the mastery of these should be supplemented with careful word study and word usage built upon this score.<sup>4</sup> It is important to realize how little would be gained by teaching a very large number of words. After 2,000 are learned, the returns from teaching each additional 1,000 diminish rapidly.<sup>5</sup> Time is wasted in school by requiring children to learn words that are seldom needed

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<sup>1</sup>Burns, op. cit., 257.

<sup>2</sup>Fitzgerald, Teaching Reading and the Language Arts, op. cit., 301.

<sup>3</sup>Burns, op. cit., 257.

<sup>4</sup>Fitzgerald, Teaching Reading and the Language Arts, op. cit., 5.

<sup>5</sup>Horn, What Research Says to the Teacher Teaching Spelling, op. cit., 5.

in writing--this especially applies to many social studies and science terms--if they are not found in a basic word list.<sup>1</sup> It has been well said that the English language has a well-designed center but no discernible circumference. It is the central words, that is, the words most often needed in writing, that pupils should learn to spell.<sup>2</sup>

Although spelling experiences should be functional, some type of foundation word list should be selected from among the excellent ones available to avoid gaps in a group's background of spelling experience.<sup>3</sup> Reasonably conclusive experimental evidence tends to indicate that for the teaching of spelling the column method is fully as effective as the context method.<sup>4</sup> Research has consistently shown that it is more efficient to study words in lists than in context.<sup>5</sup> Words studied in lists are learned more quickly, remembered longer, and transferred more

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<sup>1</sup>Burns, op. cit., 271.

<sup>2</sup>Horn, What Research Says to the Teacher Teaching Spelling, op. cit., 4.

<sup>3</sup>Shane and others, Improving Language Arts Instruction With Children, op. cit., 72.

<sup>4</sup>Greene, op. cit., 540.

<sup>5</sup>Horn, What Research Says to the Teacher Teaching Spelling, op. cit., 16.



readily to new context.<sup>1</sup>

Dolch, Fitzgerald, and Horn and others agree that a multiple sense approach is important, that vision, hearing, speech, and writing should all be used in learning to spell. Fitzgerald lists five steps which should be taken in learning to spell a word: (1) meaning and pronunciation; (2) imagery-seeing and saying the word, syllable by syllable and spelling it; (3) recall-closing eyes, spelling, checking for correctness; (4) writing the word and checking for correctness; (5) mastery-writing and checking or repeating the entire process until the word is learned.<sup>2</sup>

The comprehensive study by Gates indicated the superiority of the test-study over the study-test method of spelling for the second half of grade three and grades four through six. Early objections to the test-study approach on the basis of persistence of initial errors proved to be unfounded.<sup>3</sup> Many children may already know most of the words given on the pretest, hence should not be obliged to spend spelling periods for an entire week on a list that they already know.<sup>4</sup>

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<sup>1</sup>Horn, loc. cit.

<sup>2</sup>Strickland, op. cit., 386.

<sup>3</sup>National Council of Teachers of English, op. cit., 53.

<sup>4</sup>Shane and others, Improving Language Arts Instruction in the Elementary School, op. cit., 72.

The trend in teaching spelling rules in the elementary school has definitely been one of teaching fewer rules.<sup>1</sup>

Research has shown that the following rules have few exceptions in application and are, therefore, of practical value:

1. Words ending in silent e usually drop the final e before the addition of suffixes beginning with a vowel, but they keep the final e before the addition of suffixes beginning with a consonant.
2. When a word ends in a consonant and y, change the y to i before adding all suffixes except those beginning with i. Do not change y to i in adding suffixes to words ending in a vowel and y, or when adding a suffix beginning with i.
3. Words of one syllable or words of more than one syllable accented on the last, ending in a single consonant preceded by a single vowel, double the final consonant when adding a suffix beginning with a vowel.
4. The letter q is always followed by u in common English words.
5. English words do not end with v.
6. Proper nouns and most adjectives formed from proper nouns should always begin with capital letters.<sup>2</sup>

It has been suggested that children would be greatly helped by being taught to spell each sound by the commonest spelling.<sup>3</sup> A number of investigations have shown that children may very well give a "correct" letter presentation to a sound based upon the way that sound is spelled in some other word and yet not spell the word correctly.<sup>4</sup>

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<sup>1</sup>Burns, op. cit., 269.

<sup>2</sup>Greene, op. cit., 283.

<sup>3</sup>Horn, What Research Says to the Teacher Teaching Spelling, op. cit., 23.

<sup>4</sup>Greene, op. cit., 283-284.

Time allotments should be kept low whether spelling is taught as a special subject or in special periods in connection with language arts. In most instances the time allotment should not be more than seventy-five minutes a week and there is some evidence that if efficient methods are used, this amount could profitably be decreased. Increases in time beyond this amount do not result in comparable increases in achievement.<sup>1</sup>

Testing is also important. There can be several testings in connection with each lesson. A single correct spelling must not be taken as a true measure of a child's ability to spell a word. It is important that review periods be provided in the teaching of spelling.<sup>2</sup>

Walter Petty gave the following suggestions concerning practices in spelling instruction that should be avoided:

1. The teacher should probably not waste time calling attention to known hard spots in words. While known hard spots for many words have been determined a more positive approach is needed. Attention should be focused upon looking carefully at the word as it is pronounced rather than upon watching for a particular place of possible error.
2. The practice of writing words in the air is of doubtful value.

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<sup>1</sup>Horn, What Research Says to the Teacher Teaching Spelling, op. cit., 16.

<sup>2</sup>Burns, op. cit., 268.

3. Children should not be required to make repeated writings of words without intervening attempts at recall. The practice of having a child copy a word five times, or ten times, encourages poor habits and attitudes.
4. The teacher should avoid condemning children for asking how to spell a word. Asking how to spell a word is an expression of concern with spelling correctly and should lead to using the dictionary and other sources for checking spelling.<sup>1</sup>

Paul Burns and Alberta Lowe listed the following suggestions for the teaching of spelling based on solid research foundation:

1. There should be provision for a direct attack upon spelling as spelling rather than for incidental teaching. There should be a definite list of words, a definite method of teaching and testing, and a definite time should be set aside for spelling instruction.
2. The number of words to be taught in any given lesson should not be great perhaps twenty words per week or less.
3. There is no particular need for the spelling period to consume more than fifteen minutes a day or seventy-five minutes per week. If sufficient methods are used this amount of time is sufficient and further increases in time beyond this amount do not result in comparable increases in achievement.
4. Emphasis<sub>2</sub> would not be placed upon the teaching of rules.<sup>2</sup>

Within the specific spelling instruction period, an efficient program gives consideration to the manner of presenting new words to be taught, the pupil's study procedure, review, and testing, and helping the child acquire and maintain an interest in spelling.

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<sup>1</sup>Walter Petty, Improving Your Spelling Program, (San Francisco: Chandler Press, 1959), 24-25.

<sup>2</sup>Burns, op. cit., 263.

### CHAPTER III

#### PRESENTATION AND ANALYSIS OF DATA

This chapter contains tables of information used prior to the study in order to organize Group A and Group B as well as tables showing data obtained during the study. The data obtained prior to and during the study are also analyzed in this chapter.

Table I shows the total number of spelling errors made on twenty-four final weekly tests and four unit tests by each fourth grade pupil in the study. Each pupil was referred to in the tables by a letter of the alphabet in order to conceal the identity of each pupil.

The data compiled in Table I show a wide range of spelling ability in the total group prior to the study. Table I also shows a need for finding new ways of improving the spelling progress of the group.

Table II shows the pupils referred to by letters of the alphabet along with their intelligence quotients. The intelligence quotients were listed from the highest to the lowest along with the letter of the pupil having the intelligence quotient.

Table II shows a median intelligence quotient of 109. The mean intelligence quotient was also 109. This

TABLE I

NUMBER OF MISSPELLED WORDS BY EACH OF THE TWENTY-SIX  
FOURTH GRADE PUPILS OF THE MARSHALLTOWN COMMUNITY  
SCHOOL DISTRICT INCLUDED IN THE STUDY ON TWENTY-  
FOUR FINAL TESTS AND FOUR UNIT TESTS GIVEN  
FROM SEPTEMBER, 1966 TO MARCH, 1967

Pupils	Number of misspelled words
A	3
B	4
C	7
D	9
E	9
F	10
G	11
H	11
I	11
J	13
K	13
L	13
M	14
N	15
O	32
P	40
Q	41
R	54
S	60
T	60
U	65
V	68
W	73
X	84
Y	207
Z	243

TABLE II

INTELLIGENCE QUOTIENTS OF THE TWENTY-SIX FOURTH GRADE  
PUPILS IN THE MARSHALLTOWN COMMUNITY SCHOOL  
DISTRICT INVOLVED IN THE STUDY DURING  
MARCH AND APRIL OF 1967

Intelligence quotients	Pupils
128	C
126	M
126	E
124	R
120	L
117	I
117	H
116	D
114	Y
112	B
111	T
111	F
109	U
109	P
109	W
108	A
105	Q
103	K
102	J
97	Z
90	V
90	N
89	G
89	S
88	X

table indicates there were only three intelligence quotients below ninety, eleven that were between ninety and 110, and twelve that were higher than 110.

Group A and Group B, as formulated by the writer on the basis of the total number of misspelled words on the twenty-four final weekly tests and four unit tests as well as their intelligence quotient, are shown in Table III. The letter of each pupil, the total number of misspelled words on the twenty-four final weekly tests and four unit tests, and the intelligence quotient of each pupil in the groups are indicated in the table.

As Table III shows, the average intelligence quotient for Group A was 109 and for Group B was 108, however, Group B had the advantage of fewer misspelled words. Group A had 597 misspelled words compared to a total of 583 for Group B.

Data presented in Table IV shows the letter of each pupil, the number of words misspelled on the final test of the first week of the study, the words as misspelled by the pupils, the fractional part of the word spelled correctly, the percentage of credit given for each misspelled word, and the percentage right or grade given for Group A. For Group B Table IV shows the letter of each pupil, the number of words missed on the final test of the first week of the study, the words as misspelled by the pupils, and the percentage right or grade given.



TABLE III

GROUP A AND GROUP B AS ORGANIZED FROM TWENTY-SIX FOURTH GRADE PUPILS IN THE MARSHALLTOWN COMMUNITY SCHOOL DISTRICT DURING MARCH, 1967 ON THE BASIS OF INTELLIGENCE QUOTIENTS AND THE NUMBER OF MISSPELLED WORDS ON TWENTY-FOUR WEEKLY FINAL TESTS AND FOUR UNIT TESTS GIVEN FROM SEPTEMBER, 1966 TO MARCH, 1967

<u>GROUP A</u>			<u>GROUP B</u>		
Pupil	Intelligence quotient	Number of misspelled words	Pupil	Intelligence quotient	Number of misspelled words
A	108	3	B	112	4
E	126	9	C	128	7
D	116	9	F	111	10
I	117	11	H	117	11
L	120	13	M	126	14
K	103	13	J	102	13
G	89	11	N	90	15
P	109	40	O	109	32
R	124	54	Q	105	41
U	109	65	T	111	60
V	90	68	S	89	60
X	88	84	W	109	73
<u>Y</u>	<u>114</u>	<u>207</u>	<u>Z</u>	<u>97</u>	<u>243</u>
Average intelligence quotient	109	Total 587	Average intelligence quotient	108	Total 583

TABLE IV

SPELLING ERRORS AND GRADES GIVEN TO THE TWENTY-SIX FOURTH  
GRADE PUPILS OF THE MARSHALLTOWN COMMUNITY SCHOOL  
DISTRICT IN GROUP A AND GROUP B ON THE WEEKLY  
FINAL TEST OF THE FIRST WEEK OF THE STUDY  
MARCH 10, 1967

<u>GROUP A</u>					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
A	0				100
E	0				100
D	0				100
I	0				100
L	0				100
K	1	"tavel" for travel	$\frac{5}{6}$	4	99
G	0				100
P	3	"cimb" for climb	$\frac{4}{5}$	4	
		"ocen" for ocean	$\frac{4}{5}$	4	
		"panio" for piano	$\frac{4}{5}$	4	97
R	1	"pauh" for push	$\frac{3}{4}$	4	99
U	0				100
V	3	"pauh" for push	$\frac{1}{2}$	3	
		"paino" for piano	$\frac{2}{5}$	2	
		"tavel" for travel	$\frac{5}{6}$	4	94
X	1	"aricmitce" for arithmetic	$\frac{1}{2}$	3	98
Y	7	"sometime" for sometimes	$\frac{8}{9}$	4	

TABLE IV (continued)

<u>GROUP A</u>					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
		"pass" for push	$\frac{1}{2}$	3	
		"aritic for "arithmetic	$\frac{2}{5}$	2	
		"taver" for Travel	$\frac{2}{3}$	3	
		"whitout" for without	$\frac{6}{7}$	4	
		"handl" for handle	$\frac{5}{6}$	4	
		"peano" for piano	$\frac{4}{5}$	4	89
<u>GROUP B</u>					
B	0				100
C	1	"left" for lift			95
F	1	"travels" for travel			95 100
H	0				
M	3	"arithmetic" for arithmetic "blue" for blew "prana" for piano			85 100
J	0				

TABLE IV (continued)

GROUP B					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
N	1	"left" for lift			95
O	1	"oceas" for ocean			95
Q	2	"sometim's" for sometimes			
		"carful" for careful			90
T	3	"allso" for also			
		"travl" for travel			
		"arithmatic" for arithmetic			85
S	1	"blwe" for blue			95
U	3	"carryful" for careful			
		"travl" for travel			
		"woder" for wonder			85
Z	4	"climb" for climb			
		"abuct" for about			
		"arirrhint" for arithmetic			
		"tarvel" for travel			80

Table IV shows a total of sixteen words misspelled by Group A and a total of twenty words misspelled by Group B. In Group A, three pupils misspelled three or more words. One of the three pupils misspelled seven words. Four pupils in Group B misspelled three or more words, however, the largest number of misspelled words by one pupil was four.

Results of the second week of the study are shown in Table V. The letter of each pupil, the number of words misspelled on the weekly final test, the words misspelled, the fractional part of the word correctly spelled, the percentage of credit given for each misspelled word, the percentage right or grade given is shown for Group A. For Group B the letter of the pupil, the number of words misspelled on the final test, the words misspelled and the percentage right or grade given is shown.

As indicated in Table V an equal number of words was misspelled by both Group A and Group B on the second weekly final test given during the study. Each group misspelled a total of eleven words. The majority of spelling errors in each group were made by one pupil, the pupil with the letter Y in Group A and the pupil with the letter Z in Group B.

Data were compiled for the third week of the study as shown in Table VI. For Group A the letter of

TABLE V

SPELLING ERRORS AND GRADES GIVEN TO THE TWENTY-SIX FOURTH  
 GRADE PUPILS OF THE MARSHALLTOWN COMMUNITY SCHOOL  
 DISTRICT IN GROUP A AND GROUP B ON THE WEEKLY  
 FINAL TEST OF THE SECOND WEEK OF THE STUDY  
 MARCH 17, 1967

<u>GROUP A</u>					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
A	0				100
E	0				100
D	0				100
I	0				100
L	0				100
K	1	"givin" for given	$\frac{4}{5}$	4	99
G	0				100
P	0				100
R	0				100
U	0				100
V	3	"dr" for dried	$\frac{2}{3}$	2	
		"porh" for porch	$\frac{4}{5}$	4	
		"cloths" for clothes	$\frac{4}{5}$	4	95
X	2	"crountry" for country	$\frac{2}{3}$	4	
		"elotes" for clothes	$\frac{4}{5}$	4	98
	5	"Wednesday" for Wednesday	$\frac{3}{5}$	4	
		"gother" for gather	$\frac{4}{5}$	4	
		"cloths" for clothes	$\frac{4}{5}$	4	
		"crash" for fresh	$\frac{1}{2}$	4	
		"dpla" for dried	$\frac{1}{2}$		95

TABLE V (continued)

<u>GROUP B</u>					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
B	1	"porth" for porch			95
C	0				100
F	0				100
H	0				100
M	0				100
J	1	"deird" for dried			95
N	0				100
O	1	"barck" for bark			95
Q	0				100
T	0				100
S	1	"cloths" for clothes			95
W	1	"cothes" for clothes			95
Z	6	"wednesday" for Wednesday "fraesh" for fresh "dread" for dried "coundtry" for country "grther" for gather "proch" for porch			70

the pupils in the study, the number of words misspelled, the words misspelled, the fractional part of the word correctly spelled, the percentage of credit given for each misspelled word, and the percentage right or grade given are shown. For Group B the letter of the pupil, the number of words misspelled, the words misspelled, and the percentage right or grade given is indicated in Table VI.

Table VI shows that Group A misspelled a total of thirteen words on the weekly final test and Group B misspelled nine words. The number of misspelled words was quite evenly distributed among all the pupils except for the pupil with the letter Y in Group A who misspelled seven words.

The record of the fourth week of the study is shown in Table VII. The letter of the pupil, the number of words misspelled, the words misspelled, the fractional part of the word correctly spelled, the percentage of credit given for each misspelled word, and the percentage right or grade given is shown for Group A on the fourth weekly final test. The letter of the pupil, the number of words misspelled, the words misspelled, and the percentage right or grade given is shown for Group B on the fourth weekly final test.



TABLE VI

SPELLING ERRORS AND GRADES GIVEN TO THE TWENTY-SIX FOURTH  
GRADE PUPILS OF THE MARSHALLTOWN COMMUNITY SCHOOL  
DISTRICT IN GROUP A AND GROUP B ON THE WEEKLY  
FINAL TEST OF THE THIRD WEEK OF THE STUDY  
MARCH 24, 1967

<u>GROUP A</u>					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
A	0				100
E	0				100
D	0				100
I	0				100
L	1	"execpt" for except	$\frac{2}{3}$	3	98
K	0				100
G	1	"rilbon" for ribbon	$\frac{5}{6}$	4	99
P	2	"women" for woman	$\frac{4}{5}$	4	
		"sager" for sugar	$\frac{3}{5}$	3	97
R	0				100
U	1	"wish" for wished	$\frac{2}{3}$	3	98
V	0				100
X	1	"deding" for digging	$\frac{5}{6}$	4	99
Y	7	"exote" for except	$\frac{2}{5}$	3	
		"whes" for wished	$\frac{2}{3}$	3	
		"dove" for drove	$\frac{4}{5}$	4	
		"sgur" for sugar	$\frac{2}{5}$	3	
		"parnts" for parents	$\frac{6}{7}$	4	
		"pocet" for pocket	$\frac{5}{6}$		
		"robin" for ribbon	$\frac{1}{2}$	3	89

TABLE VI (continued)

GROUP B					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
B	0				100
C	0				100
F	0				100
H	0				100
M	0				100
J	0				100
N	0				100
O	3	"perants" for parents "ribon" for ribbon "women" for woman			85 100
Q	0				100
T	1	"except" for except			95 100
S	0				100
W	3	"erocetp" for except "sotd" for sold "culling" for cutting			85
	2	"except" for except "paristes" for parents			90

TABLE VII

SPELLING ERRORS AND GRADES GIVEN TO THE TWENTY-SIX FOURTH  
GRADE PUPILS OF THE MARSHALLTOWN COMMUNITY SCHOOL  
DISTRICT IN GROUP A AND GROUP B ON THE WEEKLY  
FINAL TEST OF THE FOURTH WEEK OF THE STUDY  
MARCH 31, 1967

GROUP A					
	Number of words Pupil misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
A	0				100
E	1	"build" for built	$\frac{4}{5}$	4	99
D	0				100
I	0				100
L	0				100
K	0				100
G	1	"coutry" for country	$\frac{6}{7}$	4	99
P	1	"famliy" for family	$\frac{2}{3}$	3	98
R	2	"liveing" for living	$\frac{6}{7}$	4	
		"woundn't" for wouldn't	$\frac{2}{3}$	4	98
	2	"staryed" for stayed	$\frac{6}{7}$	4	
		"thousant" for thousand	$\frac{2}{3}$	4	98
		"whold" for whole	$\frac{1}{2}$	4	99
X	0				100
Y	8	"feild" for field	$\frac{2}{3}$	3	
		"buitd" for built	$\frac{2}{3}$	3	
		"coutry" for country	$\frac{6}{7}$		
		"faemly" for family	$\frac{2}{3}$		
		"Wenday" for Wednesday	$\frac{2}{3}$	3	

TABLE VII (continued)

<u>GROUP A</u>					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
		"pild" for pile	$\frac{3}{4}$	4	
		"won't" for wouldn't	$\frac{5}{8}$	3	
		"tousamd" for thousand	$\frac{3}{4}$	4	87
<u>GROUP B</u>					
B	0				100
C	0				100
F	0				100
H	0				100
M	1	"aur" for our			95
J		"wondn't" for wouldn't			95
N	1	"famliy" for family			95
O	3	"coner" for corner "woulden't" for wouldn't "biult" for built			85
Q	0				100
T	0				100
S	2	"coner" for corner "Wedsday" for Wednesday			90

TABLE VII (continued)

<u>GROUP B</u>					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
W	6	"wonnt" for wouldn't "fanily" for family "traed" for trade "coutry" for country "oue" for our "Wenseday" for Wednesday			70
Z	10	"Conner" for corner "feale" for field "traed" for trade "wounldn't" for wouldn't "tousand" for thousand "sinley" for family "geese" for goose "wole" for whole "livng" for living "our" for our			50

Group A misspelled a total of sixteen words on the fourth weekly final test of the study as shown in Table VII. Group B misspelled a total of twenty-four words on the fourth weekly final test of the study as shown in Table VII. Pupils with the letters Y and Z made the most errors, and pupil W in Group B misspelled more words than in test one, two, or three. The other misspelled words were quite evenly distributed among the pupils in the two groups.

The data regarding the fifth week of the study are presented in Table VIII. The letter of the pupil, the number of words misspelled, the words misspelled, the fractional part of the word correctly spelled, the percentage of credit given for each misspelled word, and the percentage right or grade given is shown for Group A on the fifth weekly final test. For Group B, the letter of the pupil, the number of words misspelled, the words misspelled, and the percentage right or grade given is shown for the fifth final test of the study.

According to the data in Table VIII, Group A misspelled a total of five words on the fifth weekly final test of the study, and Group B misspelled a total of eight words. The errors were quite evenly distributed in Group B while the pupil with the letter Y made most of the errors for Group A.

TABLE VIII

SPELLING ERRORS AND GRADES GIVEN TO THE TWENTY-SIX FOURTH  
 GRADE PUPILS OF THE MARSHALLTOWN COMMUNITY SCHOOL  
 DISTRICT IN GROUP A AND GROUP B ON THE WEEKLY  
 FINAL TEST OF THE FIFTH WEEK OF THE STUDY  
 APRIL 7, 1967

GROUP A					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
A	0				100
E	0				100
D	0				100
I	1	"runnining" for running	$\frac{2}{9}$	4	99
L	1	"chace" for chase	$\frac{4}{5}$	4	99
K	0				100
G	0				100
P	0				100
R	0				100
U	0				100
V	0				100
X	0				100
Y	3	"engin" for engine "ecere" for excuse "bult" for belt	$\frac{5}{6}$ $\frac{1}{2}$ $\frac{3}{4}$	4 3 4	96

TABLE VIII (continued)

<u>GROUP B</u>					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
B	0				100
C	0				100
F	1	"exuse" for excuse			95
H	1	"bet" for belt			95
M	1	"so" for sew			95
J	2	"xcuse" for excuse "chas" for chase			90
N	0				100
O	0				100
Q	0				100
T	0				100
S	0				100
W	1	"havet" for haven't			95
Z	2	"havn't" for haven't "excues" for excuse			90



The results of the review unit test given over the words studied during the five weeks of the study are presented in Table IX. For both Group A and Group B, the letter of the pupil, the number of misspelled words, the words misspelled and the percentage right or grade given is shown.

Reference to Table IX shows that Group A misspelled a total of twenty-four words on the review unit test. Group B misspelled a total of twenty-seven words on the review unit test. The mean score for Group A was ninety-one per cent and for Group B was ninety per cent. Group A, which was given credit for the fractional part of a word spelled correctly, did slightly better than Group B on the unit test. This fact along with the data in Table III showing Group A having four more total spelling mistakes at the beginning of the study but with an advantage of an average intelligence of 109 compared to 108 for Group B indicated that with this group there was some progress made by giving credit for the fractional part of a word spelled correctly, even though the word was misspelled. Group A misspelled a total of sixty-one words during the five weeks of the study and Group B misspelled a total of seventy-two words. The effect of grading on this particular group may in part be attributed to their intelligence quotients. Group A had an average intelligence

TABLE IX

SPELLING ERRORS AND GRADES GIVEN TO THE TWENTY-SIX FOURTH  
 GRADE PUPILS OF THE MARSHALLTOWN COMMUNITY SCHOOL  
 DISTRICT IN GROUP A AND GROUP B ON THE UNIT  
 REVIEW TEST OF THE SIXTH WEEK OF THE STUDY  
 APRIL 14, 1967

<u>GROUP A</u>					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
A	1	"hole" for whole			95
E	1	"Wedensday" for Wednesday			95 100 100
D	0				
I	0				
L	1	"execpt" for except			95 100
K	0				
G	1	"parnts" for parents			95
P	2	"parent" for parents "feild" for field			90
R	2	"handel" for handle "woundn't" for wouldn't "excupt" for except "pearnts" for parents			90 90

TABLE IX (continued)

<u>GROUP A</u>					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
V	2	"except" for except "buite" for built			90
X	1	"hande" for handle			95
Y	11	"piono" for piano "fild" for field "engin" for engine "bluilt" for built "robbin" for ribbon "exous" for excuse "country" for country "pearts" for parents "runnig" for running "Wedesday" for Wednesday "Thosand" for thousand			45

TABLE IX (continued)

GROUP B					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
B	0				100
C	1	"parnets" for parents			95
F	4	"excipt" for except "hous" for hours "wounldn't" for wouldn't "feild" for field			80
H	1	"would'nt" for wouldn't			95 100
M	0				
J	2	"excect" for except "wouln'dn't" for wouldn't			90 100
N	0				
O	2	"excipt" for except "woulden't" for wouldn't			90 100
Q	0				
T	3	"peano" for piano "wouln't" for wouldn't "excapt" for except			85

TABLE IX (continued)

GROUP B					
Pupil	Number of words misspelled	Words misspelled	Fractional part of the word correctly spelled	Percentage of credit given for each misspelled word	Percentage right or grade given
S	1	"Wedersday"			
		for			
		Wednesday			95
W	4	"peiano"			
		for			
		piano			
		"ercept" for			
		except			
		"ribbin" for			
		ribbon			
		"parnts" for			
		parents			80
Z	9	"pino" for			
		piano			
		"coundtry"			
		for			
		country			
		"exsetp" for			
		except			
		"protnes"			
		for			
		parents			
		"riphben"			
		for			
		ribbon			
		"woundn't"			
		for			
		wouldn't			
		"thusand"			
		for			
		thousand			
		"buildt" for			
		built			
		"feild" for			
		field			55

quotient of 109 and Group B had an average intelligence quotient of 108. The lowest intelligence quotient in Group A was 88 and in Group B was 89. Therefore, it is possible that the intelligence of the group helped the pupils realize that, spelling the word as nearly correct as they could was to their advantage, even though they knew the word was misspelled in part. As a result of trying to spell as much of the word correctly as possible, Group A showed a slightly greater gain in spelling ability than Group B. This may be due to chance alone. The difference in the spelling ability of the two groups at the end of the five week study as shown on the review unit test was not great enough to assume that all groups would react in the same way. With this particular group it appeared to be of some advantage, but it is very possible that with another group of different intelligence quotients, initial spelling ability, background and attitudes the results would not be the same. More research is needed in this area.

## CHAPTER IV

### SUMMARY AND RECOMMENDATIONS

The purpose of this study was to determine the impact of grading on the spelling progress of fourth grade pupils when credit was given for the fractional part of a word spelled correctly, even though the word itself was misspelled, compared to giving no credit for a word if a part was misspelled.

The procedure employed by the investigator was to:

- (1) survey research studies pertaining to spelling and grading;
- (2) review the literature about spelling;
- (3) count the number of words missed on twenty-four weekly final tests and four unit tests;
- (4) assign a letter name for each pupil and make a list showing the number of misspelled words of the group for the first twenty-four final tests and four unit tests, starting the list with the pupil having the fewest errors and ending the list with the pupil having the greatest number of misspelled words;
- (5) obtain the intelligence quotients of each pupil taking part in the study from the cumulative folders and listing them in order, the pupil with the highest intelligence quotient listed first followed by the second highest on down to the lowest

intelligence quotient of the pupils studied; (6) organize two groups, Group A and Group B, on the basis of the number of words misspelled on the twenty-four weekly final tests and four unit tests and on the basis of the intelligence quotients of the twenty-six pupils studied, assigning thirteen pupils to each group; (7) explain to the pupils in the two groups that the writer was doing an experiment much like they often do in science and that any difference they might notice on their corrected test when they were returned to them each Friday was because of the experiment; (8) grade Group A's weekly final test for five weeks giving credit for the fractional part of a word correctly spelled even if part of the word was misspelled; (9) grade Group B's final weekly test for five weeks on the basis of the word being all right or all wrong; (10) give a unit test at the end of the five weeks containing the words studied by both groups during the five weeks; (11) compare the progress of the two groups, and the impact of grading on the spelling progress by using the results of the unit test and comparative statistics; (12) analyze the results of the unit test and make recommendations.

At the beginning of the study Group A and Group B were formed in such a way as to make them as similar as possible in spelling ability and intelligence. The total number of words missed by Group A was 587 on the twenty-four



weekly final tests and four unit tests. The total number of words missed by Group B on the twenty-four weekly final tests and four unit tests was 583. The average intelligence quotients for Group A was 109, and Group B had an average intelligence quotient of 108. During the study Group A misspelled a total of sixty-one words and Group B misspelled a total of seventy-two words. On the unit test Group A misspelled twenty-four words and Group B misspelled twenty-seven words. Group A's average grade was 90.8, whereas, Group B's average grade was 89.6. It appears from the evidence presented in this study that giving credit for the fractional part of a word spelled correctly, even though the word itself was misspelled had a favorable effect on the spelling progress of this group of fourth grade pupils, compared to the group that was given no credit for a word if a part was misspelled. The difference in spelling progress at the end of the five week study was not great but the evidence of the study warrants further study of its effectiveness with other groups, such as those with lower or higher intelligence quotients since the group studied had a rather high average intelligence quotient, or groups of different spelling abilities than the groups studied.

It is recommended by the investigator as a result of the study, that administrators encourage further experimentation in the field of grading and its impact on spelling progress. The administrator should aid the classroom

teacher in doing such research by providing guidance in areas such as this that need further study, and helping to arrange a variety of groups. If the school has two or three classes on any one grade level, the administrator might assign pupils to each classroom for one school year on the basis of spelling ability in order to promote and compare the results or impact of grading on groups of various intelligence and spelling ability. Or the administrator might help to encourage and arrange a form of departmentalized spelling program so that further research in grading and its effect on spelling progress could be studied. By such a departmentalized program pupils from various grades or classrooms would meet for fifteen minutes a day for spelling only and then return to their homeroom for all other subjects. In this way pupils could be grouped for the spelling period only according to spelling ability and/or intelligence quotients for further research. By this procedure a variety of groups could be formed as a basis for the study of grading and its impact on the spelling progress of various groups of children.

More extensive and comprehensive studies of a similar nature are recommended by the writer. Further experimentation and research is needed to determine the impact of grading on the spelling progress of all the children in our schools today.

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